

DETAILED ACTION

Amendments after Non-final office action filed on December 29, 2010 and January 12, 2012 are acknowledged. Claims 102-156 and 158-160 are pending in this application. Claims 117-150, 152-156 and 158-160 are cancelled by Examiner's amendment. Claims 102-116 and 151 are allowed.

Sequence listing filed on October 28, 2011 is acknowledged.

WITHDRAWN OBJECTIONS AND REJECTIONS

1. Objection to the abstract is hereby withdrawn in view of Applicant's amendment to the abstract.
2. Objections to the specification are hereby withdrawn in view of Applicant's amendment to the specification and persuasive arguments.
3. Objection to claim 104 is hereby withdrawn in view of Applicant's amendment to the claim.
4. Objection to claim 107 is hereby withdrawn in view of Applicant's amendment to the claim.
5. Rejections of claims 102-115 and 151 under 35 U.S.C. 112, second paragraph are hereby withdrawn in view of Applicant's amendment to the claims.
6. Rejection of claims 102-115 and 151 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement is hereby withdrawn in view of Applicant's amendment to the claim and persuasive arguments.

EXAMINER'S AMENDMENT

7. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mary Ann Brow on February 1, 2012.

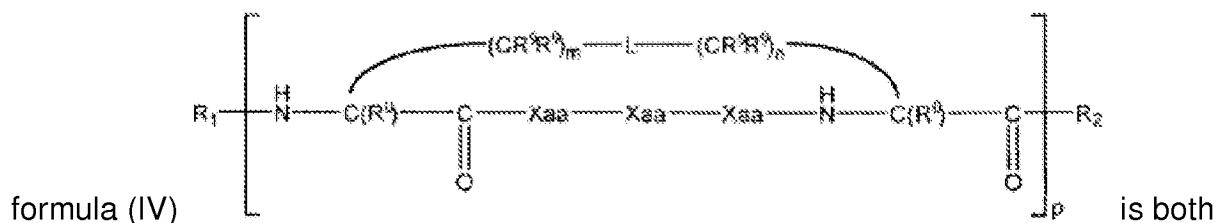
The application has been amended as follows:

Claims 117-150, 152-156 and 158-160 (claims drawn to nonelected inventions) are cancelled.

Claims 102-116 and 151 as filed in amendment on January 12, 2012.

REASONS FOR ALLOWANCE

8. The following is an examiner's statement of reasons for allowance: A compound having a plurality of alpha helical cyclic pentapeptide sequences, represented by



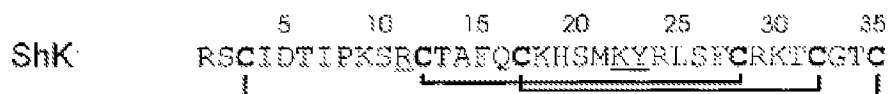
novel and unobvious over the prior art of record. As indicated in the previous office action (dated June 29, 2010), the art of interest is Joran (US Patent No. 5,364,851). US Patent No. '851 teach a cyclic peptide. However, the reference does not teach

Art Unit: 1654

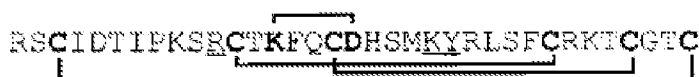
pentapeptides or repeats of pentapeptides, and does not teach the variable "L" of instant claims.

Another art of interest is Lanigan et al (Biochemistry, 2001, 40: 15528-15537).

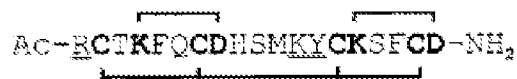
The reference teaches cyclic peptides analogs of ShK toxin:



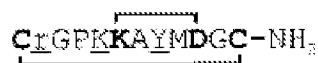
Cyclo14/18 [K14,D18]ShK



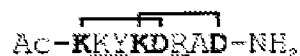
ShKmin1



ShKmin2



ShKmin3



(see p. 15529,

Figure 1). However, the reference does not teach pentapeptides or repeats of pentapeptides, and does not teach the variable "L" of instant claims.

Therefore, a compound having a plurality of alpha helical cyclic pentapeptide sequences of formula (IV) are both novel and unobvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Claims 102-116 and 151 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JULIE HA whose telephone number is (571)272-5982. The examiner can normally be reached on Mon-Thurs, 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Julie Ha/
Primary Examiner, Art Unit 1654